ABSTRACT OF THE DISCLOSURE

An ultrasound beamforming probe includes an array of transducer elements and a processing board that carries a signal processor. Receive signal connections, for a receive aperture formed from multiple transducer elements, are coupled to the first signal processor. A location memory is connected to the signal processor and holds a spatial location for the receive aperture. The signal processor retrieves the spatial location, determines a beamforming phase shift derived from the spatial location for each transducer element in the receive aperture, and applies the respective phase shift to each receive signal.